Reply filed:

Appl. No. 10/628,466 Docket No. 2019-0206P

Art Unit 2832

Page 2 of 16

AMENDMENTS TO CLAIMS

1. (Currently Amended) A signal input device comprising:

a bottom shell, said bottom shell having a top surface;

a printed conducting track unit arranged coated on the top

surface of said bottom shell, said printed conducting track unit

comprising a plurality of contact portions; and

a top cover covering said bottom shell, said top cover

having a press unit carried in a top surface thereof, said press

unit being aimed at and spaced above said contact portions of

said printed conducting track unit for pressing by a user to

selectively connect said contact portions of said printed

conducting track unit.

2. (Original) The signal input device as claimed in claim 1,

wherein said press unit is formed on the top surface of said top

cover and having a recessed portion in a bottom side thereof.

3. (Original) The signal input device as claimed in claim 1,

wherein the top surface of said bottom shell is electrically

insulating.

Appl. No. 10/628,466 Docket No. 2019-0206P Art Unit 2832 Page 3 of 16

4. (Original) The signal input device as claimed in claim 1, wherein said press unit protrudes over the top surface of said top cover.

- 5. (Original) The signal input device as claimed in claim 1, further comprising a plurality of conductive contacts respectively provided on a bottom side of said press unit corresponding to and spaced above said contact portions of said printed conducting track unit.
- 6. (Original) The signal input device as claimed in claim 1, further comprising a plurality of through holes formed in said top cover and adapted to accommodate said press unit, a plurality of rubber domes supported on the top surface of said bottom shell, and a plurality of conductive contacts respectively mounted in said rubber domes on a bottom side and spaced above said contact portions of said printed conducting track unit for connecting said contact portions of said printed conducting track unit selectively upon pressing of said press unit by the user.
- 7. (Original) The signal input device as claimed in claim 1, wherein said bottom shell comprises an IC chip, said IC chip

Reply filed:

Appl. No. 10/628,466 Docket No. 2019-0206P

Art Unit 2832

Page 4 of 16

having contact pins electrically connected to said printed

conducting track unit.

8. (Original) The signal input device as claimed in claim 1,

wherein said bottom shell has a light emitting device mounted

therein and electrically connected to said printed conducting

track unit.

9. (Original) The signal input device as claimed in claim 1,

further comprising a light guide mounted in said top cover and

extending in one through hole.

10. (Original) The signal input device as claimed in claim

1, wherein said top cover comprises two bottom engagement

portions disposed at two sides and said bottom shell comprises

two top engagement portions disposed at two sides and

respectively forced into engagement with the bottom engagement

portions of said top cover.

11. (Original) The signal input device as claimed in claim

10, wherein said bottom engagement portions of said top cover are

retaining grooves.

Appl. No. 10/628,466 Docket No. 2019-0206P Art Unit 2832 Page 5 of 16

12. (Original) The signal input device as claimed in claim 10, wherein said top engagement portions of said bottom shell are retaining ribs.

- 13. (Original) The signal input device as claimed in claim 1, wherein said bottom shell comprises a plurality of upright bonding portions respectively bonded to said top cover.
- 14. (Original) The signal input device as claimed in claim 1, wherein said printed conducting track unit comprises a layer of conducting glue, said layer of conducting glue comprising conducting portions, said contact portions and a plurality of lead wires, an insulating layer, and a layer of conducting film, said layer of conducting glue being printed on the top surface of said bottom shell, said insulating layer being printed on the top surface of said bottom shell over said lead wires beyond said conducting portions and said contact portions, and said layer of conducting film being printed on said insulating layer over said contact portions to electrically connect said contact portions.
- 15. (Original) The signal input device as claimed in claim 1, further comprising support means provided between said top cover and said bottom shell to keep said conductive contacts

Reply filed:

Appl. No. 10/628,466 Docket No. 2019-0206P

Art Unit 2832

Page 6 of 16

separated from said contact portions of said printed conducting

track unit by a distance.

16. (Original) A signal input device comprising:

a bottom shell, said bottom shell having a top surface;

a plurality of conductive contacts mounted on the top

surface of said bottom shell;

a top cover covering said bottom shell, said top cover

having a bottom surface and carrying a press unit; and

a printed conducting track unit located on the bottom

surface of said top cover, said printed conducting track unit

comprising a plurality of contact portions respectively aimed at

said press unit and separated from said press unit by a distance.

17. (Original) The signal input device as claimed in claim

16, further comprising a support means provided between said top

cover and said bottom shell to keep said conductive contacts

separated from the contact portions of said printed conducting

track unit by a distance.

18. (Original) The signal input device as claimed in claim

16, wherein said top cover has an IC chip mounted on the bottom

Reply filed:

Appl. No. 10/628,466 Docket No. 2019-0206P

Art Unit 2832

Page 7 of 16

surface thereof and electrically connected to said printed

conducting track unit.

19. (Original) The signal input device as claimed in claim

16, further comprising a light emitting device electrically

connected to said printed conducting track unit and aimed at one

through hole of said top cover.

20. (Original) The signal input device as claimed in claim

16, wherein said top cover comprises two bottom engagement

portions disposed at two sides and said bottom shell comprises

two top engagement portions disposed at two sides and

respectively forced into engagement with the bottom engagement

portions of said top cover.

21. (Original) The signal input device as claimed in claim

20, wherein said bottom engagement portions of said top cover are

retaining grooves.

22. (Original) The signal input device as claimed in claim

20, wherein said top engagement portions of said bottom shell are

retaining ribs.

Appl. No. 10/628,466 Docket No. 2019-0206P Art Unit 2832 Page 8 of 16

23. (Original) The signal input device as claimed in claim 16, wherein said bottom shell comprises a plurality of upright

bonding portions respectively bonded to said top cover.

24. (Original) The signal input device as claimed in claim 16, wherein said printed conducting track unit comprises a layer of conducting glue, said layer of conducting glue comprising conducting portions, said contact portions and a plurality of lead wires, an insulating layer, and a layer of conducting film, said layer of conducting glue being printed on the top surface of said bottom shell, said insulating layer being printed on the top surface of said bottom shell over said lead wires beyond said conducting portions and said contact portions, and said layer of conducting film being printed on said insulating layer over said

25. (Original) The signal input device as claimed in claim 16, wherein the bottom surface of said top cover is electrically insulating.

contact portions to electrically connect said contact portions.

26. (Currently Amended) A signal input device comprising:

a bottom shell, said bottom shell having a top surface;

Appl. No. 10/628,466 Docket No. 2019-0206P Art Unit 2832 Page 9 of 16

a printed conducting track unit <u>located</u> <u>coated</u> on the top surface of said bottom shell, said printed conducting track unit comprising a plurality of contact portions;

a top cover covering said bottom shell, said top cover carrying a press unit;

a plurality of rubber domes provided between said top cover and said bottom shell corresponding to the contact portions of said printed conducting track unit; and

a plurality of conductive contacts respectively mounted in said rubber domes on a bottom side and facing the contact portions of said printed conducting track unit.

27. (Original) The signal input device as claimed in claim 26, wherein said printed conducting track unit comprises a layer of conducting glue, said layer of conducting glue comprising conducting portions, said contact portions and a plurality of lead wires, an insulating layer, and a layer of conducting film, said layer of conducting glue being printed on the top surface of said bottom shell, said insulating layer being printed on the top surface of said bottom shell over said lead wires beyond said conducting portions and said contact portions, and said layer of conducting film being printed on said insulating layer over said contact portions to electrically connect said contact portions.

Appl. No. 10/628,466 Docket No. 2019-0206P Art Unit 2832 Page 10 of 16

- 28. (Original) The signal input device as claimed in claim 26, wherein said bottom shell has a light emitting device bonded to the top surface thereof and electrically connected to said printed conducting track unit.
- 29. (Original) The signal input device as claimed in claim 28, wherein said light emitting device is a light emitting diode.
- 30. (Original) The signal input device as claimed in claim 26, further comprising a liquid guide provided on a bottom side of said top cover and extending to one through hole of said top cover.
- 31. (Original) The signal input device as claimed in claim 26, wherein said bottom shell has an IC chip wire installed on the top surface thereof, said IC chip having contact pins electrically connected to lead wires of said printed conducting track unit.
- 32. (Original) The signal input device as claimed in claim 26 further comprising an electric connector electrically connected to lead wires of said printed conducting track unit and inserted into one through hole of said top cover.

Appl. No. 10/628,466 Docket No. 2019-0206P Art Unit 2832 Page 11 of 16

33. (Original) The signal input device as claimed in claim

26, wherein said top cover comprises two bottom engagement

portions disposed at two sides and said bottom shell comprises

two top engagement portions disposed at two sides and

respectively forced into engagement with the bottom engagement

portions of said top cover.

34. (Original) The signal input device as claimed in claim

33 wherein said bottom engagement portions of said top cover are

retaining grooves, and said top engagement portions of said

bottom shell are retaining ribs respectively engaging said

retaining grooves.

35. (Original) The signal input device as claimed in claim

26, wherein said bottom shell comprises a plurality of upright

bonding portions respectively bonded to said top cover.

36. (Original) The signal input device as claimed in claim

26, wherein the top surface of said bottom shell is electrically

insulating.